

California Sea Urchin Fishery Report: 2005 Wrap-Up

California Department of Fish and Game

Spring 2006

California's 2005 preliminary catch data for the sea urchin fishery shows an 8.5% decrease in landings from 2004, with both northern and southern California registering declines (**Table 1, Figures 1a and 1b**). Effort in the southern fishery has remained steady since 2000 at around 10,000 landings (receipts) annually, while northern California effort is only about 23% of what it was in 2000. Bodega Bay landed nearly 1 million pounds in 2002, but managed only one landing in 2005, largely due to the lack of a buyer. Point Arena catch and effort fell by over 50% from its 2003 level.

The 2005 southern California catch decreased by 8.7%, to 9.94 million pounds, from 2004. The long term 1975-2004 average catch is 16.6 million pounds. Santa Barbara landed 5.78 million pounds in 2005, a slight decrease over the previous year, making it the number one port in the state with just over half of the state's landings. The northern Channel Islands produced 7.4 million pounds of sea urchin in 2005, similar to the previous year, while the southern Channel Islands declined by about 300 thousand pounds from the previous year (**Figure 2, Table 2**). Production everywhere in southern California remained steady or declined except for San Nicolas Island which increased by about 60% to just over 300 thousand pounds (**Figure 3**).

Catch by area is presented for northern California for the years 2000 through 2005 (**Figure 4**). Catch from logbooks was weighted by landings data and distributed into 10 minutes of latitude along the coast. The ten miles of coastline around the Point Arena area and the area near Mendocino and Albion were the only two significant production zones over 100,000 pounds in 2005.

November proved to be the most productive month in 2005 in southern California with 1.235 million pounds of sea urchins landed (**Tables 3 and 4**).

The 11.192 million pound California sea urchin fishery yielded \$6.084 million ex-vessel in 2005, for an average of \$0.54 per pound of landed urchin. This per pound value was way down from the highest average on record of \$1.07 paid per pound in 1994. When adjusted for inflation using the latest consumer price index figures, fishermen received only an average of \$0.28 per pound in 2005. About 35% of the northern California catch was priced below \$0.20 per pound, and over 30% of the southern catch was between \$0.30 and \$0.40 (**Figure 5**). It should be noted that some buyers in southern California began writing a minimum price of about \$0.30 per pound on the market receipt at the time of unloading, starting in about 2003. This was not necessarily the

ultimate price and the effect is that price and value data are not completely representative of the actual price paid to fisherman for red sea urchins in southern California during this time period. We are working with the industry to rectify this problem.

Exports of fresh urchin roe from all of the sea urchin producing states in the U.S. were down 21%, to 1.9 million pounds worth \$34.9 million. Overall value of exports of live fresh urchins and fresh roe combined was down by over \$12 million from 2004. California exports fresh roe exclusively (**Table 5**).

Sea urchin permit renewals totaled 331 in 2005, dropping from 340 in 2004 and continuing a slow steady decline toward the ‘capacity goal’ of 300 set in regulation in the early 1990’s. The industry is currently considering whether to ask the Fish and Game Commission to change the present goal of 300 permits.

With the decline of the northern California fishery and the gradual diminishing of the sea urchin fund, our part-time northern California sea urchin scientific aid, Monica Sandoval, was reduced to working less than one day per week during 2005. With the urchin account now in crisis mode, we have had to lay off Ms. Sandoval and discontinue market sampling of the northern fishery until we can identify a new funding source. We have been able to keep Kathryn Johnson in our Los Alamitos (southern California) office working two days per week, but unless we can locate additional funds, we will have to restrict her time further. Kathryn has been instrumental in conducting market sampling, logbook entry and assisting in the production of reports like this one,

and numerous data requests for *SUFAC* and researchers.

There were 14,153 urchins measured during the 2005 season by both techs. Undersized urchins, that is between 1.5 inches test diameter and legal size, accounted for 0.8% of the sampled catch in southern California and 2.9% in northern California. However, with the 70% reduction in the northern California sample size due to Monica’s reduced hours, the accuracy of the estimate of short urchins in the northern catch has decreased. There appears to be a gradual increase in the size of urchins in sampled catches in southern California since the 2000 season, while there was a noticeable jump in the number of smaller legal-sized urchins in the 2005 sampled catch in northern California (**Figs 6A and 6B, Table 6**).

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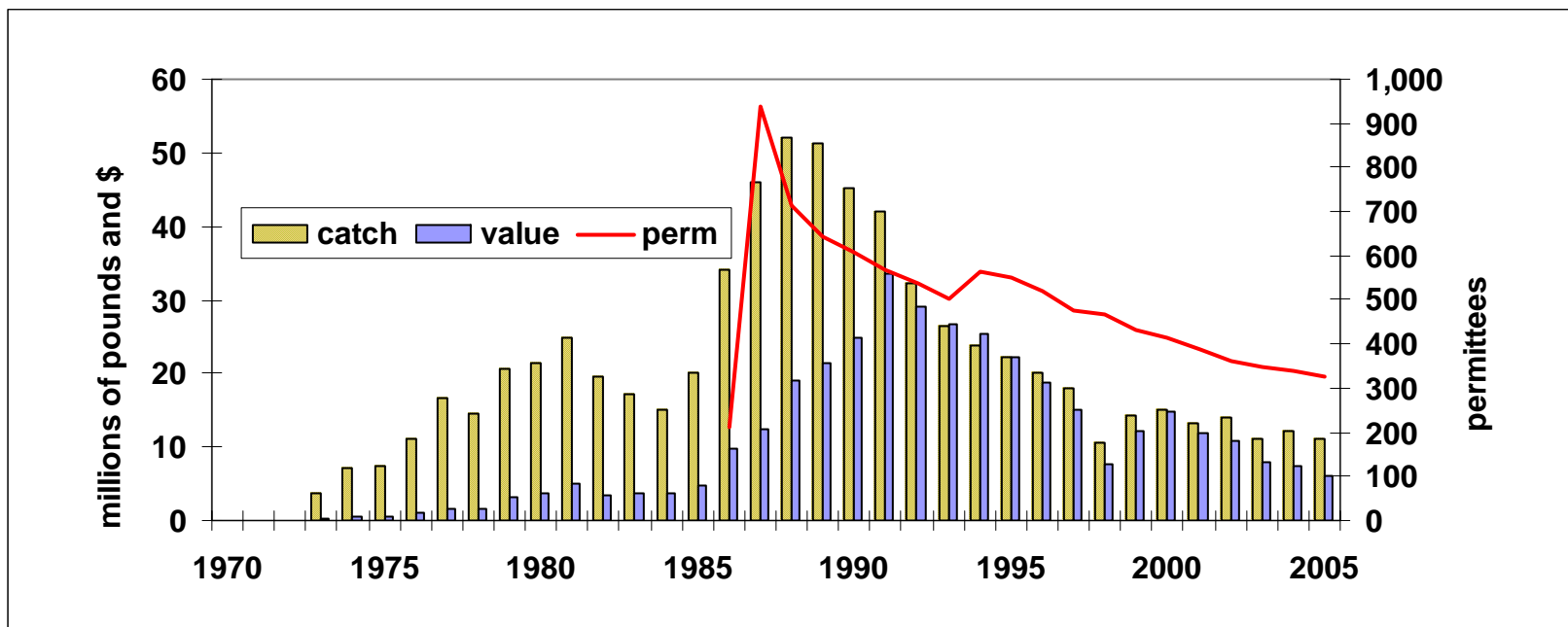
Table 1. California Red Sea Urchin Landings By Port and Year (2000-2005)									
	2005*			2004			2003		
PORT AREA	RECEIPTS	POUNDS	LBS/RCPT	RECEIPTS	POUNDS	LBS/RCPT	RECEIPTS	POUNDS	LBS/RCPT
SANTA BARBARA	4,675	5,784,866	1,237	4,739	5,871,922	1,239	3,993	4,333,122	1,085
OXNARD-VENTURA	2,003	2,259,064	1,128	2,294	2,258,585	985	2,585	2,136,106	826
LOS ANGELES	1,189	1,075,344	904	2,005	1,737,952	867	2,088	1,417,948	679
ORANGE COUNTY	114	70,488	618	248	118,107	476	217	95,175	439
SAN DIEGO	1,409	740,351	525	1,748	878,738	503	2,044	891,183	436
OTHR SC	19	8,893	468	33	22,394	679	41	33,600	820
TOTAL SOUTH	9,409	9,939,006	1,056	11,067	10,887,698	984	10,968	8,907,134	812
FORT BRAGG	771	646,468	838	498	420,809	845	1,040	830,325	798
ALBION	177	171,192	967	136	113,342	833	348	275,379	791
POINT ARENA	334	428,324	1,282	590	713,805	1,210	718	891,118	1,241
BODEGA BAY	1	830	830	43	42,634	991	144	157,515	1,094
HALFMOON BAY	0	0	0	6	860	143	0	0	0
OTHR NC	6	5,701	950	37	49,343	1,334	22	27,177	1,235
TOTAL NORTH	1289	1,252,515	972	1,310	1,340,793	1,024	2,272	2,181,514	960
STATE	10,698	11,191,521	1,046	12,377	12,228,491	988	13,240	11,088,648	838

	2002			2001			2000		
PORT AREA	RECEIPTS	POUNDS	LBS/RCPT	RECEIPTS	POUNDS	LBS/RCPT	RECEIPTS	POUNDS	LBS/RCPT
SANTA BARBARA	3,293	3,121,904	948	2,548	2,182,496	857	2,929	2,327,931	795
OXNARD-VENTURA	1,889	1,612,241	853	1,665	1,352,795	812	2,725	2,358,294	865
LOS ANGELES	3,101	2,544,997	821	4,471	4,499,933	1,006	4,491	4,886,887	1,088
ORANGE COUNTY	251	124,384	496	253	136,317	539	235	112,449	479
SAN DIEGO	2,085	1,018,383	488	1,743	788,848	453	1,535	645,024	420
OTHR SC	85	89,424	1,052	28	25,022	894	67	51,610	770
TOTAL SOUTH	10,704	8,511,333	795	10,708	8,985,411	839	11,982	10,382,195	866
FORT BRAGG	2,744	2,171,880	792	2,805	2,195,651	783	2,816	2,130,609	757
ALBION	954	840,383	881	853	643,313	754	1,082	854,839	790
POINT ARENA	1,107	1,416,367	1,279	808	815,947	1,010	995	1,077,545	1,083
BODEGA BAY	761	969,669	1,274	403	428,570	1,063	538	670,470	1,246
HALFMOON BAY	3	1,330	443	22	8,949	407	24	8,989	375
OTHR NC	32	47,639	1,489	44	37,912	862	57	26,006	456
TOTAL NORTH	5,601	5,447,268	973	4,935	4,130,342	837	5,512	4,768,458	865
STATE	16,305	13,958,601	856	15,643	13,115,753	838	17,494	15,150,653	866

SOURCE: CDFG- CMASTER

*Preliminary Data, extracted March, 2006

Figure 1a. California Red Sea Urchin Catch, Value and Permits, 1970-2005.



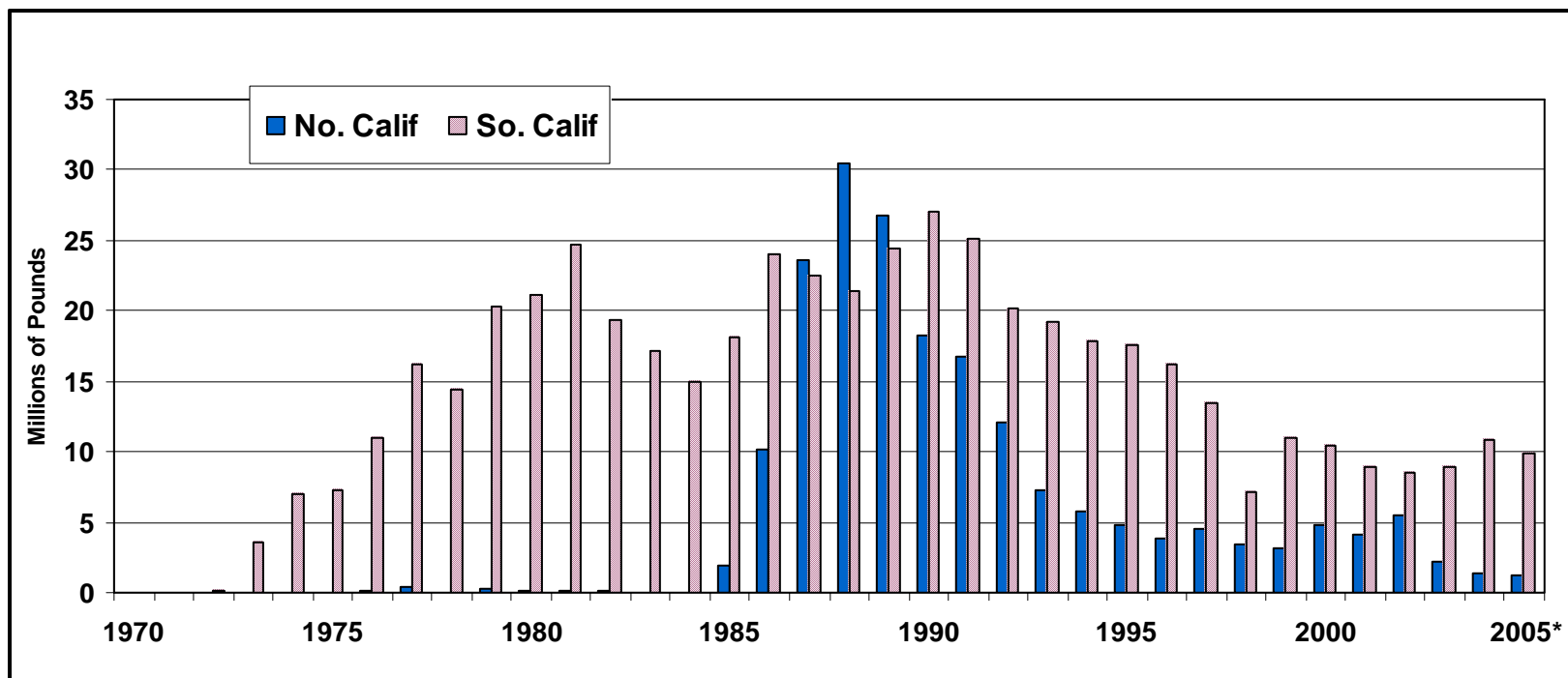


Figure 1b. Northern and Southern California Commercial Red Sea Urchin Catch, 1970 – 2005.

* as of March 2006

Figure 2.- See Figure 3 for other Southern Calif areas.

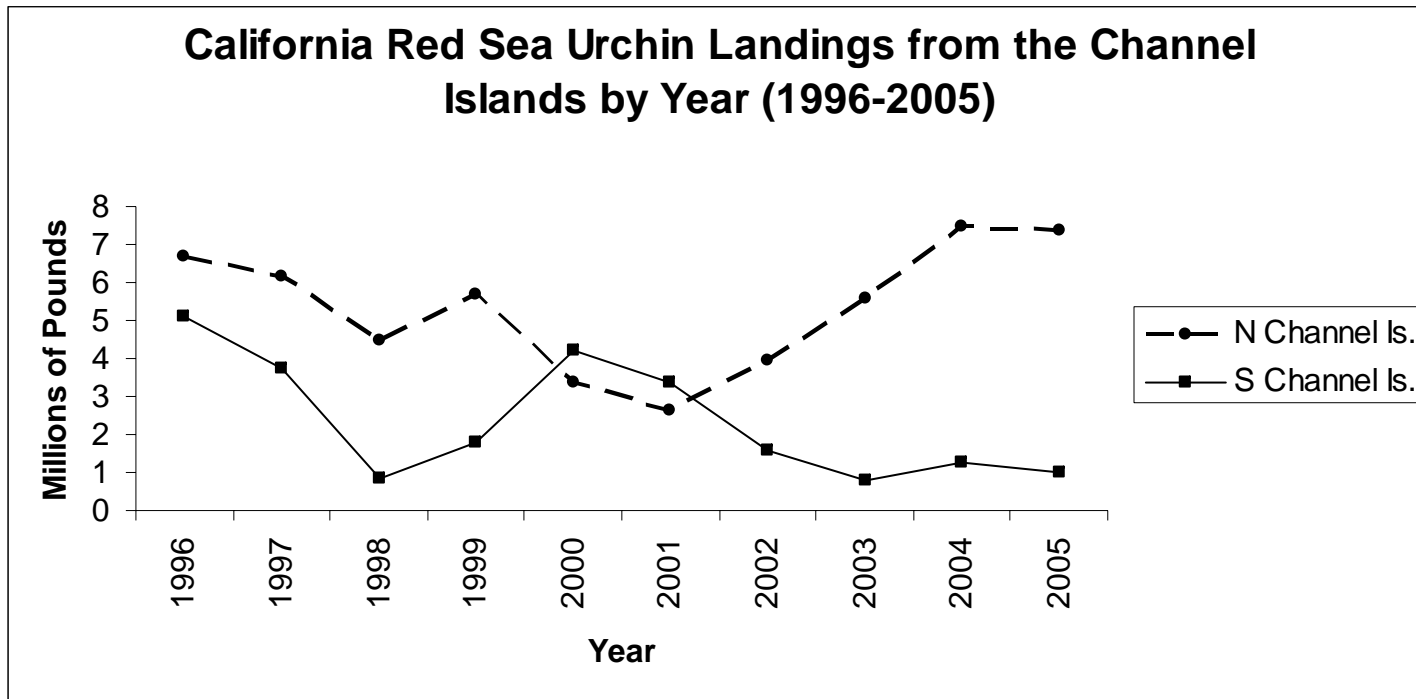


Table 2.	NORTHERN CHANNEL ISLANDS*			SOUTHERN CHANNEL ISLANDS**		
	Receipts	Pounds	Lbs/Rec	Receipts	Pounds	Lbs/Rec
1996	6,674	6,678,249	1001	5,058	5,114,622	1011
1997	6,823	6,177,511	905	3,677	3,758,304	1,022
1998	5,164	4,479,578	867	845	825,990	978
1999	6,541	5,668,401	867	1,434	1,808,704	1,261
2000	4,264	3,392,971	796	3,189	4,234,268	1,328

	NORTHERN CHANNEL ISLANDS*			SOUTHERN CHANNEL ISLANDS**		
	Receipts	Pounds	Lbs/Rec	Receipts	Pounds	Lbs/Rec
2001	3,144	2,644,252	841	2,626	3,346,385	1,274
2002	4,266	3,922,537	919	1,183	1,574,832	1331
2003	5,517	5,586,922	1,013	564	763,329	1,353
2004	6,273	7,463,516	1,190	896	1,263,066	1,410
2005	6,023	7,355,104	1,221	701	974,766	1,391

Source: C-Master data Compiled: March 06 Produced By: KJ

*Northern Channel Islands: Anacapa, Santa Cruz Island, Santa Rosa Island, and San Miguel Island

**Southern Channel Islands: Santa Catalina Island, Santa Barbara Island, and San Clemente Island

Figure 3 – see Figure 2 for Northern and Southern Channel Islands.

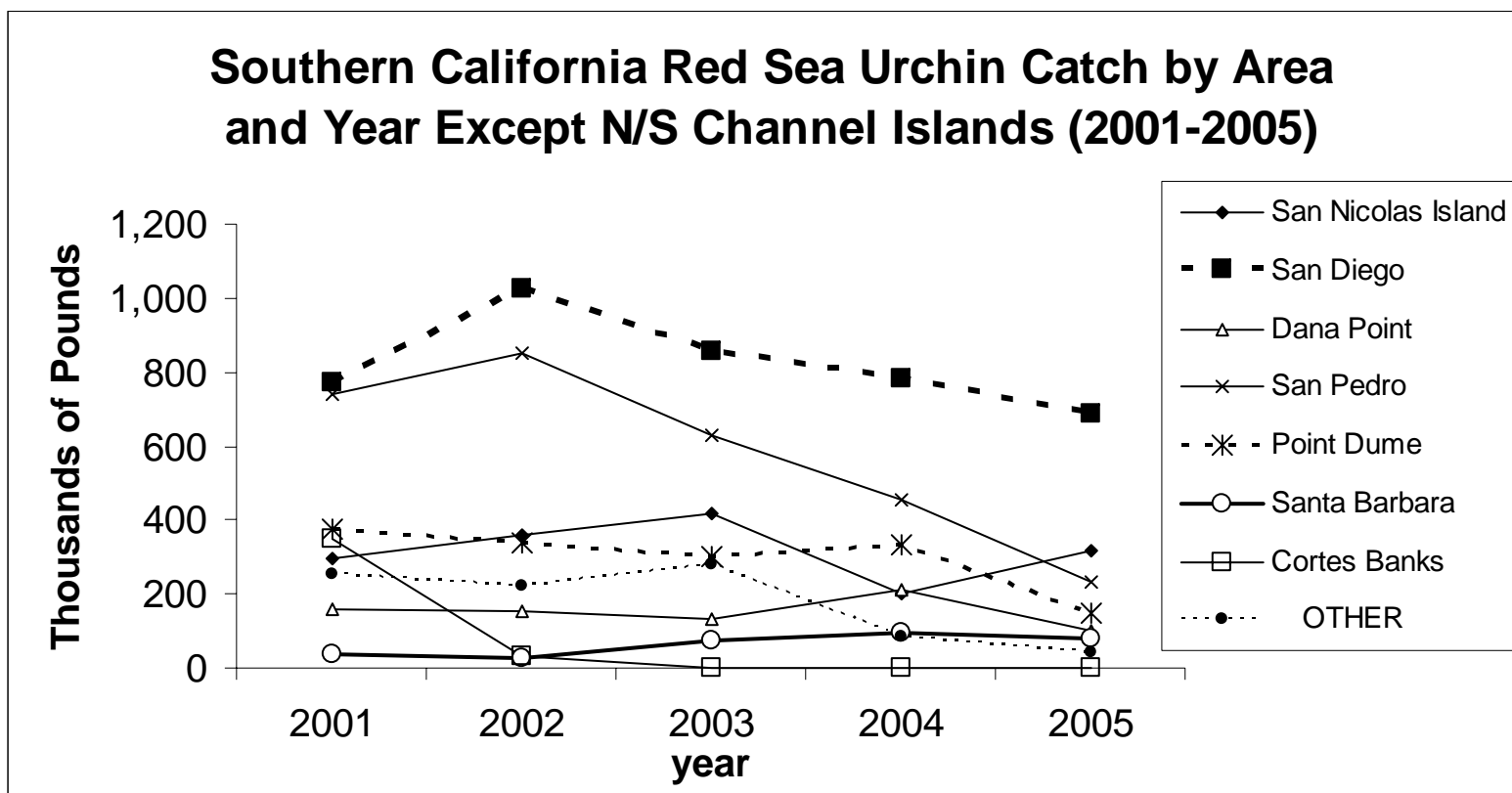
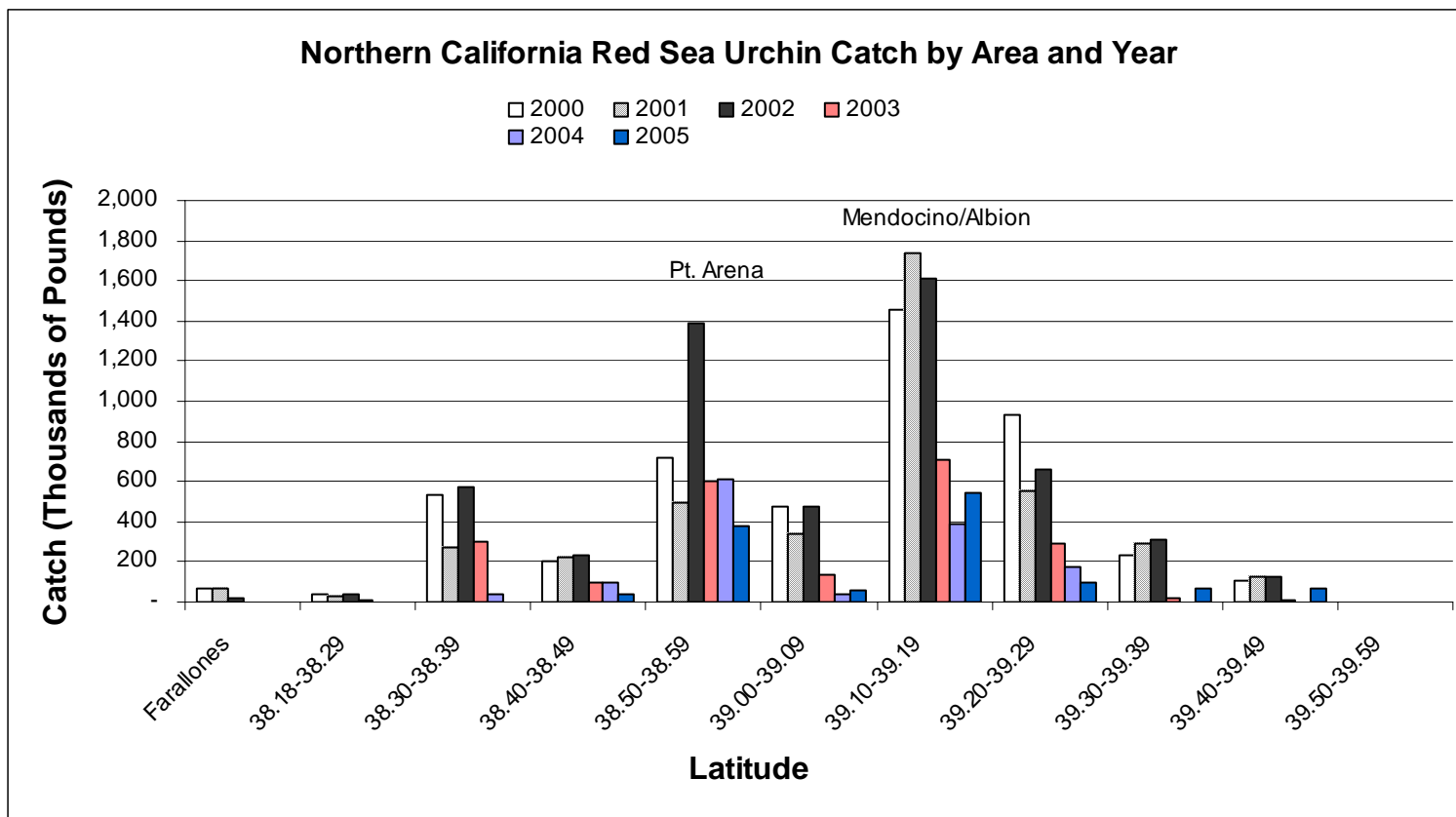


Figure 4



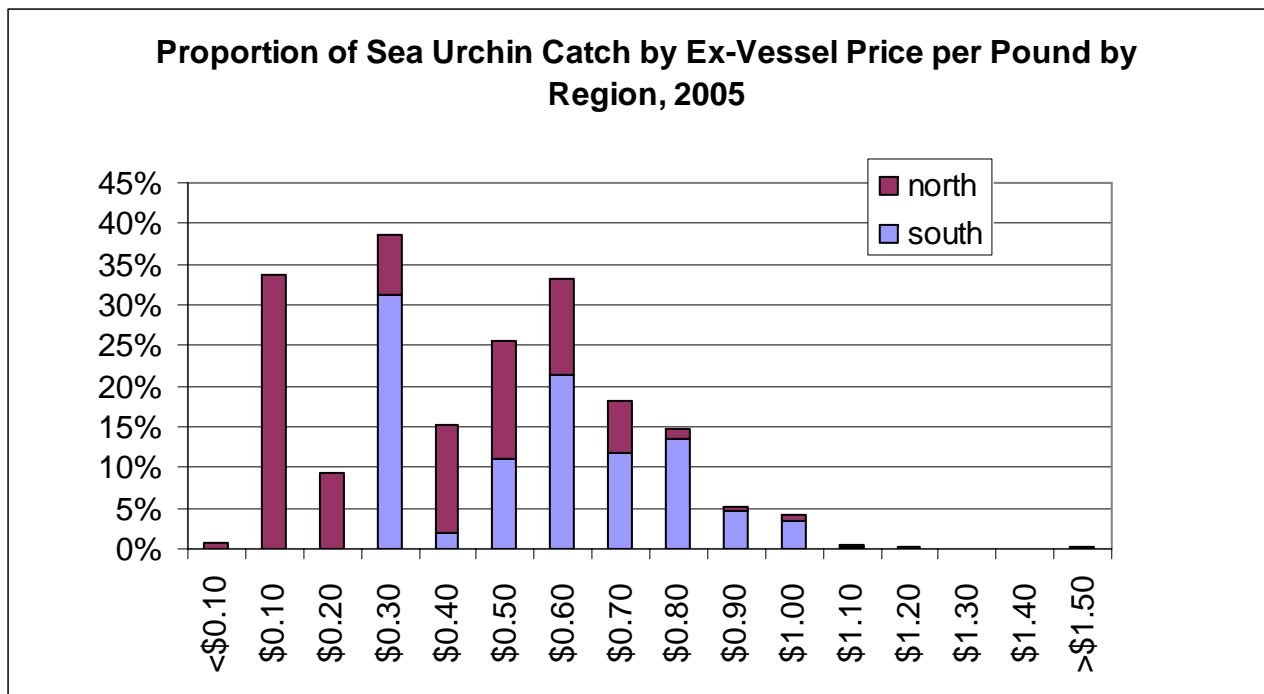


Figure 6.

Tables 3a and 3b

So.CA Red Sea Urchin Lands by Month			
2004	Receipts	Pounds	Lbs/Rec.
Jan	1,057	1,091,727	1,033
Feb	643	630,293	980
Mar	1,082	983,845	909
Apr	702	564,049	803
May	887	841,010	948
Jun	829	751,971	907
Jul	597	578,982	970
Aug	1,101	1,130,643	1,027
Sep	1,110	1,090,025	982
Oct	926	928,038	1,002
Nov	1,205	1,351,544	1,122
Dec	932	948,720	1,018
Total	11,071	10,890,847	984
So.CA Red Sea Urchin Lands by Month			
2005	Receipts	Pounds	Lbs/Rec.
Jan	716	774,379	1,082
Feb	700	701,226	1,002
Mar	551	569,741	1,034
Apr	665	617,502	929
May	836	831,622	995
Jun	729	665,284	913
Jul	516	516,986	1,002
Aug	952	1,099,833	1,155
Sep	1,013	1,121,923	1,108
Oct	886	951,240	1,074
Nov	1,055	1,235,163	1,171
Dec	791	854,289	1,080
Total	9,410	9,939,188	1,056

Tables 4a and 4b

No. CA Red Sea Urchin Lands by Month			
2004	Receipts	Pounds	Lbs/Rec.
Jan	143	172,243	1,204
Feb	81	73,915	913
Mar	189	174,779	925
Apr	113	110,077	974
May	129	121,769	944
Jun	29	35,111	1,211
Jul	42	46,678	1,111
Aug	129	129,372	1,003
Sep	125	124,906	999
Oct	97	98,251	1,013
Nov	137	144,411	1,054
Dec	93	106,827	1,149
Total	1,307	1,338,339	1,024
No. CA Red Sea Urchin Lands by Month			
2005	Receipts	Pounds	Lbs/Rec.
Jan	142	145,419	1,024
Feb	177	183,458	1,036
Mar	125	128,931	1,031
Apr	121	119,524	988
May	123	115,759	941
Jun	72	60,817	845
Jul	59	53,822	912
Aug	99	102,823	1,039
Sep	96	86,192	898
Oct	81	71,958	888
Nov	115	99,373	864
Dec	78	84,256	1,080
Total	1,288	1,252,332	972

Table 5. U.S. Sea Urchin Exports, 2003 to 2005.

Source: NMFS: Fisheries Statistics and Economics Div., Current data through December, 2005.

Product	Country	2003 Pounds	2003 Value	2004 Pounds	2004 Value	2005 Pounds	2005 Value
LIVE/FRESH	CANADA	42,189	\$101,329	215,342	\$401,457	191,926	\$353,477
LIVE/FRESH	CHINA	16,561	\$33,051	2,206	\$4,400	0	\$0
LIVE/FRESH	GERMANY	2,499	\$6,750	0	\$0	0	\$0
LIVE/FRESH	HONG KONG	17,365	\$77,026	0	\$0	0	\$0
LIVE/FRESH	ITALY	1,318	\$2,629	0	\$0	0	\$0
LIVE/FRESH	JAPAN	1,177,264	\$7,946,249	907,378	\$6,484,205	551,449	\$3,795,452
LIVE/FRESH	MEXICO	2,246	\$27,527	0	\$0	6,003	\$5,280
LIVE/FRESH	SOUTH KOREA	9,517	\$18,996	2,781	\$5,550	0	\$0
LIVE/FRESH	TAIWAN	32,976	\$68,966	0	\$0	0	\$0
LIVE/FRESH	UNITED KINGDOM	1,893	\$4,860	0	\$0	0	\$0
Subtotal		1,303,829	\$8,287,383	1,127,707	\$6,895,612	749,378	\$4,154,209
ROE/FRESH	CHINA					1,002	\$26,311
ROE/FRESH	MEXICO					461	\$3,135
ROE/FRESH	DOMINICAN REPUBLIC	1,609	\$16,500	0	\$0	0	\$0
ROE/FRESH	GERMANY	536	\$12,214	0	\$0	0	\$0
ROE/FRESH	HONG KONG	372,621	\$5,565,834	459,076	\$6,863,616	361,945	\$5,302,366
ROE/FRESH	ISRAEL	562	\$18,930	0	\$0	0	\$0
ROE/FRESH	JAPAN	1,817,925	\$35,788,570	1,922,463	\$36,994,482	1,500,140	\$28,480,437
ROE/FRESH	MALAYSIA	273	\$6,901	0	\$0	0	\$0
ROE/FRESH	NETHERLANDS	1,214	\$13,024	278	\$6,132	0	\$0
ROE/FRESH	SINGAPORE	0	\$0	295	\$4,010	0	\$0
ROE/FRESH	SPAIN	483	\$8,333	0	\$0	0	\$0
ROE/FRESH	TAIWAN	19,911	\$392,573	37,250	\$838,434	43,425	\$1,065,726
ROE/FRESH	UNITED KINGDOM	0	\$0	1,609	\$15,973	0	\$0
Subtotal		2,215,135	\$41,822,879	2,420,971	\$44,722,647	1,906,972	\$34,877,975
Grand Total		3,518,964	\$50,110,262	3,548,678	\$51,618,259	2,656,350	\$39,032,184

Figures 6A and 6B.

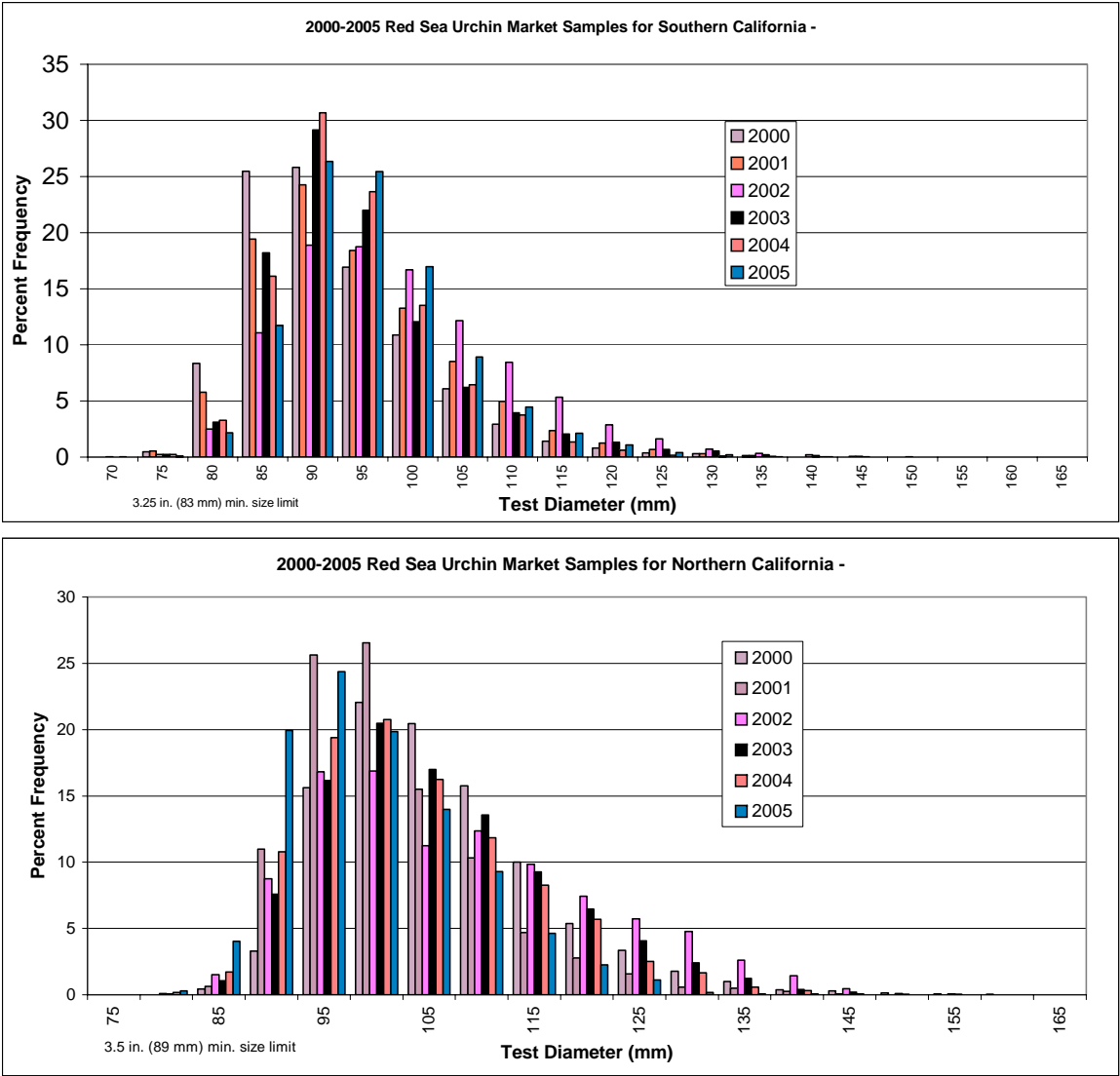


Table 6.

Market Sample Statistics- No. California					Market Sample Statistics- So. California				
Year	Sample Size	Mean	SD	% Short	Year	Sample Size	Mean	SD	% short
1999	2,277	102	9.1	3.3	1999	9,723	93	7.8	3.5
2000	5,738	108	10.0	0.2	2000	7,460	94	9.0	2.9
2001	2,239	103	8.7	0.1	2001	6,716	96	9.0	2.5
2002	3,525	109	13.2	0.9	2002	9,135	101	10.9	1.3
2003	4,669	108	11.0	0.6	2003	13,872	96	9.3	1.3
2004	6,191	105	10.3	1.1	2004	10,478	96	7.9	1.5
2005	1,810	101	8.7	2.9	2005	12,343	97	8.2	0.8

Minimum Test Diameter – 3.25 inches southern and 3.5 inches northern California.